DOCUMENT RESUME

ED 121 543 RC 009 145

AUTHOR Clark, G. Cameron
TITLE Samples of Farmer Training Programmes in Asia with Special Reference to Sons of Small Farmers.
PUB DATE 31 Oct 72
NOTE 47p.; Not available in hard copy due to marginal legibility of original document; Paper presented at Seminar on Extension and Other Services Supporting the Small Farmers in Asia (Berlin, West Germany, October 31 - November 22, 1972)

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS *Agricultural Education; Case Studies; *Developing Nations; *Educational Alternatives; Extension Education; Farmers; Nonformal Education; Out of School Youth; Parent Student Relationship; *Program Descriptions; *Rural Youth
IDENTIFIERS *Asia; Ceylon; Indonesia; Philippines

ABSTRACT

Three case studies are presented which describe new approaches to agricultural education and training of Asian rural farm youth on their own small farms in Ceylon, the Philippines, and Indonesia. Providing an initial summary, each case study is discussed in terms of its background; planning stages; objectives; course of events; problems; results; and significant lessons learned. The Ceylon experiment (1963-64) is described as involving 31 youth (aged 16 to 25) in individual home farm projects; wherein, trainers spent two-thirds of their time on the trainees' farms dealing with realistic problems as they arose and the rest of their time in formalized instruction (parent/student/teacher cooperation and coordination are cited as major reasons for program successes). The Philippine project is described as a two-year terminal training course for out-of-school male and female farm youth aged 12 to 25; wherein, trainees spent the majority of their time mastering technical farm/home and managerial skills via well planned home projects closely supervised by an instructor. The Indonesia study is described as involving two components: The Young Farmers' Courses (two hours of lecture per week for mature farm youth also engaged in home projects); and the Young Farmers Training Centers (one-year terminal vocational agricultural education offered to future farmers aged 17 to 25). (JC)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED121543

RECEIVED
DEC 15 1975
NMSU
E.R.I.C.

SAMPLES OF FARMER TRAINING PROGRAMMES

IN ASIA WITH SPECIAL REFERENCE TO SONS OF SMALL FARMERS

Case Studies
prepared by

G. Cameron Clark

Regional Rural Institutions Officer for
Agricultural Education, Extension and Rural Youth
FAO Regional Office for Asia and Far East
Bangkok, Thailand

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

for

Seminar on Extension and Other Services Supporting
The Small Farmers In Asia
German Foundation For Developing Countries
Berlin, West Germany
31 October - 22 November
1972

BEST COPY AVAILABLE

CASE STUDY NO. 1:

Young Farmers' Vocational Training in Ceylon

I. Summary

This case study relates the experience of some agricultural staff of the Ceylon Department of Agriculture in 1963/64 to plan and execute a radical new approach to education and training of youth for farming. Instead of the classical approach to agricultural education of bringing the student to the teacher, this approach forced the teacher to go to the student in his own community, on his own farm and to relate the instruction to the real life problems and activities of the farm. Thirty-one youth between the ages of 16-25 years with their parents approval participated in this one year's training. The instructor became an agricultural teacher-cum-extension worker, spending two-thirds of his time on the trainees' farms, helping them with their individual home-farm projects and only one-third of the time giving formal instruction, during slack periods on the farm, at a central location convenient to the trainees. As the trainers were recruited from the regular agricultural extension staff of the Department of Agriculture, and worked with the sons of small farmers from a settlement scheme, it is felt the case may have special relevance to this seminar.

II. Background

Department of Agriculture personnel in Ceylon have long recognized the importance of vocational agricultural training for their rural youth. Over the years the Department has established 19 Practical Farm Schools on tracts of farm land, varying in size from 20 acres to over 1,000 acres. An average

of 50 trainees per school receive a one year training but less than 5% return to practical farming upon graduation. But this is hardly surprising since all those selected for entrance have at least a middle school education and both parents and youth use the schools as a means of acquiring further training and qualification for possible government employment. Those who did enter farming tended to be the sons of large farmers or landlords who had access to sufficient land and production capital.

To overcome the failure of these schools to reach the real future farmers Mr. H.L.C. Ilangakoon, then Agricultural Officer (Education) with the assistance of some agricultural extension and agricultural research workers decided to develop and implement in 1963/64 a new form of young farmer training. As those most interested were already working in the dry zone area of Ceylon, and since authorization for their deployment on such a new scheme rested with the local district agricultural officer, the Hingurakgoda area of the Minneriya Colonization Scheme was finally selected. The choice of a land settlement area was also felt to have other advantages for a pilot project of this nature, in that such an area had a fairly settled pattern of agriculture on which the training could be based, while supervision was also easier, in that individual farm allotments were not unmanageably widespread. Further reasons for the selection of the Minneriya Colonization area were that it was not already served by a Practical Farm School of the residential type, and that the parents of trainees were more likely to be cooperative and helpful where their individual allotments were larger than usual. On the other hand, possible disadvantages were that the entire scheme had been heavily subsidized by Government, creating

a heavy dependency on Government by the farmers and a reluctance for any self help activities.

III. Initial Planning

First, they analyzed the reasons why so few graduates of Practical Farm Schools returned to farming. They found that the youth who actually become farmers were unable to be spared by their parents from their daily home farm duties to attend long residential courses. The training received on the large school farms was generally not applicable to small private farm conditions and the teachers had no small farm management experience. While the principles of the new technology were applicable, many of the methods used on the commercial school farm were not. A way had to be found to relate practical training to average-farm conditions. Rather than trying to simulate small farmer conditions on an artificial school farm, it was decided to use each of the trainees' home farms for their practical training. To do this the cooperation of the parents had to be secured, which in turn provided an opportunity to gradually influence parents. This was considered essential as it was discovered that it was the negative attitude of many of the parents towards farming that discouraged many of the Practical Farm School graduates from even trying to practise what they had learned.

The criteria for selection of trainees was that they had to be literate (could read and write) sons of farmers who were on farms and farming, between 16-25 years of age and who had good prospects for continuing in farming. It was decided to conduct the pilot in a colonization scheme area where farmers receiving land had previously had to agree to designate only one son as heir

to the farm. It was felt that by limiting training only to those sons officially designated heirs it would ensure a minimum of wastage.

It was decided that during the slack seasons for agricultural operations, the trainees would gather at a central place for classroom instruction, while during the balance of the time they would put their learning into practice on their own home farms, under the supervision of their instructor. This supervised home farm project programme was considered to be the core of the training as it gave the students an opportunity to practice their new knowledge under real conditions, thus learning both the art and science of farming. However, the proportion of time between classroom and practical training was left for the instructor to work out based on day-to-day experience.

The staff for the project consisted of one professional level agricultural extension officer, Mr. M.L.C. Ilangakoon, who served as instructor plus a junior level field assistant, Mr. T.M.A. Tenekoon trained at one of the Practical Farm Schools, who was to help out with the supervised home-farm projects. It was felt that this staff could handle about 30 trainees during the year. The instructor was given a free hand in developing the methodology of the project under the general administrative support of a senior agricultural officer incharge of that district. Close liaison was also maintained with the agricultural research station serving the area. The project was approved for one year on the general understanding that if successful it was to continue for a second year at which time the trainees would be turned back to the regular extension staff for follow-up support. However, the initial planning did not include specific proposals as to how or by whom the evaluation should be

done at the completion of the first year.

The overall objective of the project was to demonstrate that a farm-centered agricultural training programme for older rural youth could have a rapid impact on agricultural productivity and social development in an area and at a fraction of the cost of classical residential type vocational agricultural training.

The objective of the classroom instruction was to provide an efficient teaching method for giving the trainees some understanding of the scientific principles and theory behind specific farming practices recommended for their supervised home-farm projects and to raise their general level of awareness of the contribution which science and technology can make to the economic and social development of their farms and community in general. Some instruction was also required to improve their basic reading and writing skills as simple farm record keeping was found to be an important skill for development. This was one of the needs identified by the instructor in his initial village survey as hardly any of farmers had any clear idea regarding their income and expenditure.

Great emphasis was placed on the importance of the supervised farming programme on the trainees'home farms. The general objectives of this programme were:

1. to develop abilities needed for proficiency in farming of the type in which the boy is likely to engage;
2. to provide the student with desirable motivation and to give purpose and direction to his study of agriculture;

3. to provide subject-matter material from real-life situations for more practical instruction;
4. to develop skills and abilities, habits, and attitudes and ideals, concerning farming in real-life situations;
5. to develop judgment and the ability to make management decisions;
6. to provide an opportunity for students to accumulate livestock, equipment, and capital, so as to aid them to establish themselves in farming;
7. to improve the home-farm business and to contribute to improved living on the farm; and finally,
8. to improve farming in the community through the introduction of improved farming practices.

IV. Course of Events

A series of meetings were held in the settlement area to give publicity to the training scheme to which both youth and parents were invited and encouraged to ask questions. Care was taken to explain clearly that trainees would receive no free material assistance from the Government, that certificates would not be issued upon completion but rather that their success could best be indicated by the increased profitability of their farming. Parents were informed that as practical training formed the core to this new approach, their agreement for their sons to operate a part of the home farm under the guidance of the instructor would be necessary. Further that a portion of the resulting profits should be left with them both as an incentive and to give

them working capital for future projects.

A total of 31 trainees were selected all but two of whom were heirs to their parent's farm. The parents gladly agreed to let their sons manage a portion of both their paddy land and their uplands. They even went further than expected and decided amongst themselves to let their sons keep all the profits resulting from their home projects, after deduction of legitimate expenses such as production costs and land rent.

An important part of the first phase of training was a survey of each trainee's home farm by the instructor. The information gathered and problems identified served firstly as the basis for development of the curriculum and secondly it provided base-line data against which any progress could be evaluated. The survey showed that all farmers grew paddy during both the Maha (October to March) and Yala (April to September) seasons and that little use was ever made up their uplands for any type of production. Consequently it was decided that each trainee would be required to have a paddy project during both crop seasons and anupland vegetable project during the Maha season. In addition to these two common projects, each trainee, after detailed discussion with the instructor, was permitted to select individual projects such as groundnut and onion cultivation, tobacco growing, poultry raising and raising budded mango plants. Each trainee carefully planned his projects from both a technical and economic point of view. This included tentative budgets, production goals and possible marketing arrangements. The keeping of cultivation records and their analysis was also taught with emphasis placed on their functional use for decision making.

As all trainees lived within a reasonable distance of Hingurakgoda, a classroom was secured and equipped there. Trainees came each day during the slack season to learn about the new practices for paddy and vegetable growing and the scientific reasons behind their use. Information on other crops and poultry was given according to their interest and the problems being encountered on their home farms. To help cover their costs of meals and paper etc. each trainee received a stipend of one rupee for each day he attended formal classes. As it turned out, trainees were able to get away for a total of about 90 days spread throughout the year for formal classroom type instruction.

The instructor spent the balance of the time visiting the trainees on their home farms, helping with their projects and discussing their progress with them individually and with their parents. Group demonstrations for such things as budding of mangoes and field trips to neighbouring progressive farmers were other teaching methods frequently used. Every student was visited by the instructor at least once a week and between the instructor and his field assistant, trainees were visited on the average of every 3-4 days.

V. Problems Encountered and How They Were Met

As could be expected, problems arose of both a technical and social nature. Several students were insistent on raising poultry and the instructor spent a great deal of time helping them to develop realistic and viable poultry farming projects, but in the end they had to be abandoned due to certain prejudices held by their parents. The vegetable growing projects either failed or suffered seriously due to lack of reliable irrigation water. The control of irrigation water rested with another department of government

and the instructor found it difficult to make effective contact with those responsible above his level. Trainees had trouble securing custom tractors to plough their fields on time. The timely availability of planting seed and fertilizer and ensuring markets for their produce were other problem areas. The instructor was able to facilitate these services and supplies in many cases, but the marketing of all crops except paddy remained a problem. Even groundnuts for which there was a guaranteed price, were difficult to market due to a very good crop. Several of the trainees ended up having to sell their harvest where they could, even outside the local cinema as roasted peanuts.

The instructor spent a great deal of his time helping to solve parent-son problems. In the long run this proved to be time well spent for no amount of technical training could be applied until these human problems were satisfactorily settled. However, two parents still reneged on their agreement to let their sons share in the profits resulting from their home projects.

Despite the success of the first year of the project, it was not permitted to continue for a second year due to lack of appreciation and understanding of its objectives by policy level officials. Some saw it primarily as a new approach to extension and criticized it on the grounds that it was unrealistic to have one professional extension worker for 30 farm family units. Others saw it primarily as vocational agricultural education and while approving the favourable teacher-student ratio of 1:30 criticized it because it did not fit into the normal educational system; had no fixed curriculum and the teachers would be difficult to properly supervise. Since the new approach fitted the organizational structure of neither the Department of Agriculture nor the

Department of Education, the project fell between two stools and was lost.

Sufficient attention had not been given to involving the regular agricultural extension staff in this training with the result that there was no proper follow-up of the trainees after the project came to an abrupt conclusion. It had been planned that during the second year of the project this bridge would be developed but under the circumstances this unfortunately proved to be too late. Some also argued that since the project was started in a land settlement area, its findings were not applicable to the more typical farming communities of Ceylon.

VI. Results Achieved

1. Only 2 out of 31 trainees dropped out during the year which is a very good record for such an innovative project.

2. All 29 of these trainees continued in farming at least into the second year and were disappointed that the project did not continue through the second year as originally planned. Although no real follow-up study has been done, both persons directly involved in the project have returned to the area several times since and report that nearly all are still engaged in farming.

3. The cost of training each student for the year worked out at approximately one-third the cost of training a student at a residential Practical Farm School (Rs. 320 vs. Rs.900, exclusive of the cost of operating the school farm). When considering the cost relative to the numbers who actually

continue in practical farming, this "on-farm-within-community" approach is vastly superior.

4. The parents of the trainees developed new attitudes towards education in general and modern farming in particular and were anxious to have the project continue. They also asked that the instructor should organize special training for themselves in the second year.

5. Adult neighbours also saw the benefit of practical education and training and requested that special adult training courses be organized for them.

6. The trainees home projects served as method and result demonstrations and clearly demonstrated to the entire community the quick economic "pay-off" which education and training can give when it is problem centered. Unfortunately the policy makers did not have the benefit of seeing this demonstration else their decision not to continue the project might have been different.

7. From the standpoint of staff development it is believed that the opportunity this type of training experience gave to the instructors to gain a better understanding of the real problems and real potentials of peasant farmers contributed much to their professional development and future promotion within the Department of Agriculture.

8. The IBRD Mission on Education to Ceylon in 1966 reported that "Vocational farm training has been successfully tried by the Extension Service of the Ministry of Agriculture as a pilot project..." and recommended that "a full evaluation of this promising system of training should be undertaken at an early date". As of March 1970 the Ministry of Agriculture was not aware that any such evaluation had been undertaken.

VII. Significant Lessons

1. Agricultural education and training given to the right farm youth, at the right time and in the right way as suggested in this project does positively affect agricultural productivity and is a sound economic as well as social investment giving a quick pay-off.

2. Agricultural education and training can be given most efficiently and effectively to farm youth when the teaching is directly related to their recognized needs, when it permits them the opportunity to immediately test their new knowledge on their home farms with at least the tacit approval, if not the encouragement, of their parents.

3. Any approach to vocational agricultural education needs to actively involve parents as well as the rural youth since the social and cultural obstacles inhibiting farming amongst rural youth are as important as the lack of technical knowledge.

4. Individual home farm projects provide an excellent method for teaching new farming practices, including the economic and social aspects of the new technology. The integration of new practices and their effect upon the total management of a family farm is an important consideration that can best be taught youth through supervised projects on their home farms.

5. This approach more or less forces an instructor to make his teaching relevant to the needs of trainees and at the same time helps him to do so because of the opportunity it gives him to become intimately acquainted with real farm problems.

6. The failure of the project to continue a second year points up the importance of adequately involving, from the outset, all concerned policy level officials and of keeping them informed of progress - both problems and successes.

7. Any programme of vocational agricultural education and training for sons of small farmers must be geared to the daily work pattern on their home farms which is largely dictated by the agricultural cycle for the area.

8. Regular agricultural extension staff need to be fully involved from the outset in any special programme of farm youth education and training in order to ensure their technical support and interested follow-up, after completion of the training period.

9. 'On-farm-within-community" based vocational agricultural training is more effective and less costly than residential institution-based training.

10. Any pilot project on agricultural training should be initiated in a typical farming community so that its findings may prove applicable to the widest possible farming area.

11. The employment absorptive capacity of farming in Asia must be greatly increased. Until a small farmer can come to see that through intensification and diversification the productivity of his small acreage can be made to support another family unit, he will continue to encourage his sons to seek alternative employment. Thus the value of this type of training programme, which reaches both parent and youth and helps them work out together both the technical and the sociological problems inhibiting their cooperation on a small farm unit.

References

1. Rural Asia Marches Forward by C.W. Chang, UPCA Textbook Board, College, Laguna, Philippines -- Chapter 9 A Pilot Project on Young Farmers' Training in Ceylon by M.L.C. Ilangakoon and T.M.A. Tenekoon, Department of Agriculture, Ministry of Agriculture and Food, Colombo, Ceylon.

2. Some Observations And Suggestions On Practical Farm Schools In Ceylon by G. Cameron Clark, FAO Regional Office for Asia and Far East, Bangkok - Mimeograph 6 pages — 3 December 1969.

3. IBRD Ceylon Preliminary Survey of Education, Chapter VIII - Agricultural Education and Training - Published by Ceylon Ministry of Planning and Economic Affairs, 1966.

BKK 3/10/72
RU/E 14.4.3
GCC/cn

CASE STUDY NO. 2:

Vocational Education for Out-of-School Farm Youth in the Philippines

I. Summary

This case describes a two-year terminal training course for out-of-school farm youth (male and female between the ages of 12-25 years) which places emphasis on the mastery of technical farm and home skills and the development of managerial abilities. Trainees spend the majority of their time on well-planned home projects under the close supervision of an instructor. Group instruction is provided once or twice a week in a central location. This case study was selected because it presents an example of the Ilangakoon/Ceylon pattern adapted to local conditions as a result of systematic research and planning by highly qualified university researchers and international personnel.

The project has been conceived in three phases: Phase I - surveys and research (1 May to 31 October 1971); Phase II - pilot training programme (1 November 1971 to 31 October 1973); and Phase III - expansion of the revised training programme (1 November 1973 to 31 October 1975). No specific recommendations can yet be drawn as the project has scarcely completed its first full year of training. However, solid progress has been made which it is felt will be of interest to the seminar.

II. Background

Disenchantment with the failure of the over 80 vocational agricultural schools in the Philippines to return more than 16 per cent of their graduates to active farming, plus the rapidly growing numbers of out-of-school rural

youth led agricultural educators to seek new approacher to the problem. In an effort to relate the Barrio High School programme more directly to realistic employment opportunities in farming, the Department of Agricultural Education of the College of Agriculture, University of the Philippines (UPCA) initiated in 1969 a pilot Barrio Development High School. It differed from the normal Barrio High School in that in addition to providing graduates of primary school an opportunity to go on to a full four-year high school in their own barrio (village), the Development School gave occupational training in farming. This was done by making each student undertake a home-farm project, under the supervision of his teacher, who was an agricultural graduate. But this approach, while being innovation, was still part of the formal educational system and left untouched the vast majority of rural youth who never complete primary school or who have long since graduated. In order to reach these youth, largely living and working on farms it was decided that a non-formal educational approach should be tried.

At the invitation of Dr. D.L. Umali, then Vice President of UPCA, and Director of the South East Asian Regional Centre for Graduate Study and Research in Agriculture (SEARCA), the writer visited the UPCA campus in April 1970 and discussed possible approaches to the problem with Dr. G.F. Saguiguit, Assistant Director of SEARCA; Dr. Severino R. Santos Jr., Chairman, Department of Agricultural Education, UPCA; Dr. Tito E. Contado, Assistant Professor of Agricultural Extension and Project Adviser, Pilot Barrio Development High School; and Dr. Vincente A. Quiton, Assistant Professor of Agricultural Education at UPCA. As the UNICEF Regional Office had expressed interest in supporting

innovative pilot approaches to out-of-school rural youth training in the Region, the UNICEF Office in Manila was at the same time contacted and informed that they might shortly be requested to assist with a Philippine proposal. Dr. Quiton quickly developed a project proposal which was submitted in May 1970 to the FAO Regional Office in Bangkok. This was discussed at a meeting in June of the Ad Hoc Inter-Agency FAO/ILO/UNESCO/UNICEF Committee on Rural Training held in Bangkok. It was agreed that Mr. John Pilgram, a UNICEF financed social research specialist stationed in Bangkok should visit the Philippines in August to review the research methodology of the project proposal. The writer was also requested to help UPCA finanicialize the educational and training aspects of the pilot project during his planned visit to the Philippines in September. Based on their technical comments and following certain administrative adjustments, UNICEF agreed to finance the pilot project from its Regional Project Preparation Fund.

From the outset it was planned that this older rural youth project should be one of the pilot training programmes within the framework of the UPCA/SEARCA Social Laboratory[1/] located in the municipality of Pila, 27 kilometers from the UP College of Agriculture at Laguna.

Pila consists of 12 barrios (villages) with 1,588 households having a combined population of 9,868. Pinagboyanan, the barrio eventually selected for

---

1/ A joint programme of the UP College of Agriculture (UPCA) and the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) involving the establishment of a center for an institutional approach to agricultural development. Special training projects have been developed for adult farmers, rural women, rural school teachers, mass education as well as older rural youth.

this youth project, is the largest with 265 households. Just over half (51%) of the population are within the age group of 7-25 years, the majority of which are out-of-school. Of the males 21 years old and above, 71% are engaged in farming, either as farmers or as hired farm labourers. Most women and children (12-20 years) help on the farm and in the home. Rice, coconuts and fruit trees are the major crops grown while poultry, ducks and swine are the major livestock raised. Irrigation water is available to seven of the 12 barrios. Eighty-two per cent of the farm families are engaged in rice farming with average holdings of 1.3 hectares. Most farmers have adopted high yielding varieties of rice while 63 per cent use fertilizers and 55 per cent insecticides. Transport facilities are good. Although Pila has been declared a land reform area, only 27 per cent of the rice farmers have shifted to leasehold tenancy, the remaining 73 per cent continuing under a share-crop tenancy arrangement in which the landlord usually pays half of the expenses in return for half of the harvest. The major government services covering irrigation, land reform and extension have representatives located in Pila. All barrios have easy access to an elementary school. Only one barrio has established its own barrio high school. One private secondary school serves the community. The nearest trade school is located in the provincial capital, Sta. Cruz, just eight kilometers from Pila. Each barrio has a Barrio Council headed by a Barrio Captain. A number of social and religious organizations exist. Three barrios have 4-H clubs. As part of the institution building programme of the Social Laboratory, five farmers' associations are being organized. Pila has one rural bank (interest at 12 per cent per annum) and the bulk of the credit is

being provided by merchants and landlords at rates up to 100 per cent per annum. No permanent health services exist in the area but rural health workerswere reported making regular visits to the barrios.

III. Initial Planning

The project design followed the Ilangakoon/Ceylon pattern which basically requires the agricultural teacher cum extension worker to come to the youth on their farms thereby using real farms as the practice laboratories, rather than bringing the trainees away from their farms for vocational training on artificial school farms.

The stated purpose of the project is to develop and conduct a systematic programme of vocational education for out-of-school farm youth that shall serve as a pattern for a nation-wide programme of vocational education for out-of-school farm youth, not only in the Philippines but also in the neighbouring countries of Southeast Asia. It was planned initially to cater to the 18-25 years age group. But because of UNICEF's primary interest in out-of-school youth under 17 years of age and the rapidly growing numbers of such youth in the Asian Region, it was decided to compare the performance of the two age groups - 12 to 17 years and 18-25 years.

The project was conceived as a research-cum-action pilot in three parts:

Phase I - Community survey, clientele study and curriculum research (6 months);

Phase II - Pilot training programme (2 years);

Phase III - Programme expansion with experimentation (2 years).

Considerable attention was given to planning a functional organizational structure. A high-level Consultative Board composed of representatives of 15 key national agencies was established. The support of certain national agencies and influential individuals was recognized to be essential, should the project prove successful and warrant expansion into a national programme. It was decided that national educational agencies would be represented by national level officials while national agriculture and extension related agencies could best be represented by senior officials from their provincial offices.

The project is actually executed by a Project Team made up of four members:

Project Administrator	-	Dr. Severino R. Santos Jr.
Project Leader	-	Dr. Vicente A. Quiton
Project Rural Sociologist	-	Dr. Tito E. Contado
Project Instructor	-	Dr. Macario D. Andres

This Team operates under the overall administrative supervision of an Executive Board made up of the Dean of UP College of Agriculture and the Director of SEARCA and a Project Advisory Committee composed of leading educators from within UPCA and SEARCA.

The Project Team is assisted at barrio level by a Local Advisory Committee composed of:

Barrio Captain

Barrio PTA President (Parent Teachers Association)

Barrio Elementary School Principal

Four out-of-school farm youth (trainees)

The entire project budget is only about Peso 200,000 (about US$ 33,000) for the full period of 4½ years. It is being funded largely by UNICEF with the balance coming from SEARCA. There is no expenditure from the Government except the staff of the UPCA.

The project has been scientifically planned from the outset with clear objectives and provision for systematic evaluation at critical periods in the life of the project.

The detailed planning for each phase has been as follows:

(A) Phase I

Plans for the first phase consisted of detailed steps involving a comprehensive survey of the agricultural, sociological and economic conditions of the selected municipality of Pila. The group informant technique was selected for use in this study. Later, in depth interviews were to be given to all out-of-school farm youth and their parents in three selected barrios in order to get detailed information on their problems and to determine their general attitudes. Following analysis of the data a report was to be prepared as the basis for developing a model curriculum for a farm youth training programme. The training programme was to be planned to achieve the following specific objectives:

1. To develop desirable attitudes among out-of-school farm youth toward farming as their life work.
2. To assist out-of-school farm youth to get started and established in a farm enterprise.

3. To help out-of-school farm youth learn the basic principles underlying approved agricultural practices.

4. To assist out-of-school farm youth in developing approved practices related to selected farm enterprises.

5. To assist out-of-school farm youth in developing competencies in farm management, agriculture marketing, and farm mechanics.

6. To develop among out-of-school youth some competence in ancillary trades.

7. To train out-of-school farm youth to become effective rural leaders and responsible citizens.

8. To develop among female out-of-school farm youth desirable skills in home management and family nutrition.

While it was recognized that the final curriculum was to be based on the research findings of Phase I, it was envisaged that each trainee would be involved in the following activities:

1. Group instruction - four hours/week; 2 sessions/week.
2. Individual instruction on the farm - one hour/week.
3. Supervised farming project in an enterprise of his choice in consultation with his instructor.
4. Participation in the activities of the Young Farmers' Association or the 4-H Club (if one is organized).

It was further envisaged that the subject matter contact of the course would include the following:

Unit I. Principles of Agriculture:

A. Opportunities in agriculture.

B. Basic principles of plant growth and propagation.

C. Basic principles of animal growth and reproduction.

D. Basic principles of soil management.

Unit II. Approved Practices in Crop Production:

A. Growing and caring for selected crops.

B. Making a home garden.

C. Selecting and using fertilizers.

D. Selecting and using agricultural chemicals.

Unit III. Approved Practices in Animal Production:

A. Raising and caring for selected livestock.

B. Controlling diseases and parasites.

Unit IV. Approved Practices in Farm Management and Marketing:

A. Keeping farm records.

B. Obtaining credit for farming.

C. Selecting the farm enterprise.

D. Utilizing available farm labor.

E. Marketing farm products.

F. Storing farm products.

Unit V. Ancillary Trades and Farm Mechanics (for boys only):

A. Using farm tools and equipment.

B. Maintenance and repair of farm tools and equipment.

C. Carpentry and woodworking.

D. Masonry.

Unit VI. Approved Practices in Farm Home Management (for girls only):

A. Food preparation and preservation.

B. Managing the family finances.

C. Maintaining and beautifying the farm home.

D. Principles of child care.

E. Handicraft making.

It was planned that in teaching Unit VI, the project instructor would have to request the assistance of resource persons available in the locality.

(B) Phase II

The second phase was designed to test the training programme developed in Phase I under the following eight steps:

1. Identify two barrios (villages) in the municipality where to conduct the pilot training programme.

2. In one barrio identify and select 25 out-of-school farm youth, age 12-17, who are willing to participate in the programme.

3. In the other barrio identify and select 25 out-of-school farm youth, age 18-25, as prospective participants in the programme.

4. Conduct a benchmark study of both age groups.

5. Conduct the pilot training programme for two years with one agricultural instructor.

6. At the end of the training programme conduct a post-test study of both age groups.

7. Evaluate the results of the training programme for both groups.

8. Revise the curriculum of the pilot training programme on the basis of the analysis of results and evaluation.

The instructor is to be an agricultural graduate with at least one year's practical experience as an agricultural teacher or extension worker; be a competent generalist in farming, be fluent in the Tagalog dialect; be prepared to drive a motorcycle and to reside in a barrio. His duties are to assist in the design of the curriculum, to prepare suitable instructional materials for the pilot programme and to conduct the training at village level. Group instruction should relate to the trainees supervised farm projects.

Criteria for selecting the trainees was established as follows:

1. A young person, regardless of sex, who is out-of-school and residing in the barrio.

2. Must be interested in farming as life work or in the process of getting started in farming.

3. Must have at least a fifth-grade education and must be able to read and write.

4. The parents of unmarried youths must be practicing farmers and possessing an economic unit of farm land.

5. Must obtain the permission of the parents or the landlord to participate in the training programme and to apply approved farm practices under the supervision of the agriculture teacher.

6. Must be willing to attend the group instruction regularly and to cooperate with the teacher during on-farm individual instruction.

7. Must agree to undertake a supervised farming project.

The main features of the instructional programme were determined as being:

1. A non-formal type outside the existing system of vocational education.

2. Length of training will be two years.

3. Group instruction - 50 hours per year.

4. Supervised farm projects and on-farm instruction.

Each trainee shall have an individual farm project which shall be planned and conducted by the trainee under the supervision of a project instructor, who shall visit each trainee for on-farm instruction at least once a week.

5. Special instructional group activities (group projects, field trips, field days, etc.).

6. Involvement of parents in the instructional programme.

7. The instructor of the out-of-school youth shall reside in the barrio.

(C) Phase III

Under the third phase of the project, two additional instructors are to be recruited and the revised programme expanded into three municipalities. In addition, the comparative effect of putting greater emphasis on farm management skills, the use of a revolving loan fund and changing the duration of the training from two years to one year will be tested. Different treatment with controls will be tried in two different barriors in each of the three municipalities.

IV. Course of Events

Phase I of the project commenced on 1 May 1971 and was completed on 31 October of the same year. Phase II commenced on 1 November 1971 and by the time of this Seminar will have completed its first of two years.

The Project Rural Sociologist assisted in designing, pre-testing and revising the group informant survey schedule. Two interviewers were trained to use the schedule. Before conducting the survey, meetings were held with the Municipal Council of Pila, the Municipal Mayor and the barrio captains to explain the project. It was heartily endorsed and all expressed their desire to assist with its implementation to the limit of their respective capacities. The community survey started on 1 June and covered all 12 barrios of Pila by 31 July 1971. Processing, tabulation and analysis of the data was completed by 15 September 1971, and the research report shortly thereafter.

The interview method was used to gather detailed information on the educational, occupational and socio-economic conditions of all the out-of-school rural youth including their parents in three selected barrios. A

total of 456 out-of-school youth between the ages of 12-25 and their parents, totalling 214, were interviewed. Some of the more significant information which was considered in relation to finalizing the training programme was:

- A typical out-of-school youth had 5.6 years formal schooling and had dropped out of formal schooling 5.3 years previously. Their average age was 17.5 years.
- Most gave financial difficulties (67 %) or need to help parents on the farm (10%) as reasons for leaving school. Only 2% mentioned poor scholastic achievement as a reason for quitting school thus disproving the claim that most school learners are slow learners.
- Functional literacy amongst out-of-school youth was high - 99% could still read and write.
- Most male out-of-school youth were helping their parents with farming while girls assisted in household work. However, under-employment was high.
- Both youth (77%) and parents (92%) expressed a desire for vocational training of youth with 49% males and only 6% females requesting training in farming. Girls preferred dressmaking. However, when asked to consider the limitations of their present life, 56% male youth and 18% of the girls indicated they expected to be engaged in agricultural occupations either as farmers or as hired farm labourers in the future. At the same time they considered themselves too busy

with their work to be able to attend formal class instruction.

- Families tended to be large with an average of 7.8 members earning a gross family income of Peso 3,195 (US$500) per annum. Most of the fathers earned their living as rice farmers, fishermen or farm labourers. They had an average of 2.8 years schooling (mothers only 2.3 years).
- Despite their poverty, 96% of the families owned their own homes and 69% had radios.
- Most parents thought six months training, meeting four hours daily would be adequate while the average youth preferred 8 months duration,
- Most parents were willing to give their youth free time to attend instruction, to provide some money for instructional materials and to permit use and management of a part of their farm lands for home projects.
- Two-thirds of the 49 parents who were tenant farmers thought their landlords would permit them to share part of their land for home projects. Only 20% of the 35 parents who were hired farm labourers felt certain they could obtain some land for the farm projects of their out-of-school youth.
- Fatalism was a predominent attitude amongst both the out-of-school youth and their parents.

The Pilot Training Programme (Phase II) of the project started on 1 November 1971. Of the three barrios studied, Barrio Pinagbayanan had the

highest number of out-of-school youth and a wide range of agricultural activities. Both parents and the Barrio Council expressed great interest in youth training and since it had sufficient youth to permit selection of participants for both groups, Pinagbayanan was finally selected as the site for the Pilot Training Programme. By being able to select trainees for both age groups from the same village, the number of variables was reduced for later comparisons.

In selecting the trainees, in addition to general publicity, the Project Instructor contacted all families having out-of-school youth and left application forms for those interested. Applications received were screened by the Project Team and the Local Advisory Council. Thirty-eight trainees were finally selected of which 20 were from the 12-17 years age group and 18 from the 18-25 years group. The Barrio Council secured a classroom for the trainees and an office for the Project Instructor in the local elementary school. The local Advisory Committee was organized and started to meet regularly the last Friday of every month. Through its initiative the Project was able to obtain two plots of land for group instructional purposes. One plot (1/5 hectare), secured from a local land owner, was planted to vegetables by the trainees after organizing themselves into an association while a 1/4 hectare plot at the back of the elementary school was planted to rice. These group projects were used by the Project Instructor as method demonstrations for teaching improved farm practices including the maintenance and operation of a small land tractor, provided by UNICEF. During the first six months, group instruction was given twice a week but from 1 June it has been reduced to once a week in order to give the instructor more time for individual on-

farm instruction and for supervision of the home-farm projects. To motivate the trainees, a survey of occupational opportunities in farming was conducted and the findings discussed. Considerable time was spent on teaching trainees how to draw up farm plans and budgets in preparation for the establishment of their individual supervised farming projects.

Up to the end of June 1972 the following topics had been covered in group instruction:

a. Starting a vegetable garden.

b. Preparing and accomplishing business agreements in connection with the conduct of supervised farming projects.

c. Securing seeds, animal stocks, and farm supplies.

d. Operating and servicing the Iseki hand tractor.

e. Providing housing for animal projects (swine, rabbit, poultry).

f. Selecting rice seeds and preparing rice seedlings.

g. Preparing the rice field for planting.

h. Financing the supervised farm project.

i. Keeping farm records.

The topics on selecting rice seeds and preparing rice seedlings were discussed when the trainees were preparing the group demonstration rice field for planting. The topic on starting a vegetable garden was discussed when the trainees were initiating their vegetable garden projects. At all times group instruction is related to the actual farming needs of the trainees.

Lack of capital to start their individual farm projects has delayed some trainees, but as of 30 June 1972 twenty-four trainees had started a total of

four different types of home projects. They were:

- Swine raising (5)
- Rabbit raising (5)
- Backyard vegetable gardening (11)
- Rice farming (3)

As a result of a recent decline in the price of poultry, several trainees were advised to drop their plans for poultry raising.

Monthly meetings with parents are scheduled for the last day of each month for the purpose of keeping parents informed of progress and problems and to seek their suggestions and cooperation in their solutions.

The project area has recently experienced severe damage from flooding and typhoons but the writer is not yet aware of the effect of these natural catastrophies on the pilot project as such.

V. Problems Encountered and How They Were Met

As the project developed and as more and more of the trainees launched their home projects, it became clear to the Project Team and to the Local Advisory Committee that the work load of the Project Instructor was becoming too heavy. In order for the Instructor to meet the criteria of at least one hour per trainee per week of individual on-farm instruction and project supervision, it was decided to reduce the total number of trainees from 38 to 30. At the same time the number of meetings per group was reduced from twice to once a week starting from June. It was considered that this would also give the trainees more time for their home projects and to assist their parents with the regular farm work, especially during the busy planting season.

The latter had become a problem for some who gave it as a reason for irregular attendance at group instruction. However, other reasons also given were barrio "fiestas" and the long distance to the training site, especially during rains.

Trainees whose parents are financially hard-up are having touble establishing their individual farm projects. A few fortunate youth were able to obtain animal stock under a local traditional system whereby a private individual loans a breeding animal to someone who is prepared to care for it on the condition that the lender receives a share of the produce or gain. This shortage of capital to start economic projects was foreseen by the end of Phase I of the project and a request for a guarantee loan fund of Peso 20,000 was made to a philantropic group of prominent business man called Philippine Business for Social Progress. Information has just been received that the request has been approved.

A typhoon in late June destroyed most of the group vegetable production project but unfortunately little can be done to prevent such natural hazards, so common to farming in the Philippines.

VI. Results Achieved

Although the pilot project is not yet half completed (only 18 out of 54 months) certain practical achievements may already be noted:

1. A socio-economic survey has been planned, executed and analysed in a scientific and systematic manner and the findings have been used in the design of an action-oriented pilot training project at field level. Too frequently surveys are undertaken with no assurance that the findings

will be utilized or conversely, that practical training programmes are initiated without the benefit of any scientific fact-finding or even base-line studies as a basis for later evaluation. Both tendencies have been avoided in this project.

2. The cooperation and support of both the trainees' parents and the community leadership have been purposefully cultivated and secured. This may be regarded as an initial achievement. It was the Local Advising Committee which secured the land for the two group projects.

While the pilot training programme is progressing well, which in itself is an achievement, it might be dangerous to draw further conclusions at this early stage.

VII. Significant Lessons Learned

Whether this approach to vocational training of out-of-school farm youth succeeds or fails it has already progressed far enough to provide some very useful information:

1. It is already clear that in any development programme, involving sons and daughters of small farmers, tenants or farm labourers coming from the economically weaker sector of society, provision of and access to production credit must be considered from the outset. Education and training in how to secure and manage credit, both individually and collectively and in how to accumulate working capital through

regular savings would appear very necessary for future farmers in Asia. In a practical training programme such as this, practice in handling money is at least of equal importance to practice in handling fertilizers.

2. The great value of thorough planning, establishing concrete objectives including a detailed plan of work with provision for periodic evaluation becomes abundantly evident with the completion of Phase I of the project.

3. The research findings of Phase I provide solid evidence of what many educators in the fields of both agricultural extension and formal agricultural education have long known but were reluctant to recognize. This is that the vast majority of Asia's out-of-school rural youth who come from small farms and who are inevitably destined to a future as full-time farmers, are automatically excluded from any type of agricultural education or training which requires them to be absent from their home farms for anything more than a few hours or days at the most.

4. The writer is confident that with the increasing stability already evidenced within the Philippines, this pilot project will within the next twelve months have many more important lesson to teach concerning innovative approaches to the pressing problem of the vocational education and training of the millions of out-of-school farm youth,

particularly as it relates to the sons and daughters of small farmers.

Reference

1. Vocational Education For Out-of-School Farm Youth: A Pilot Project In The Philippines, by Dr. Vicente A. Quiton, Department of Agricultural Education, College of Agriculture, University of the Philippines - mimeo 22 pages, 1971 (a basic project document prepared for UNICEF).

2. Report on Discussions with UPCA Staff Concerning Proposed UNICEF Assistant Research Project entitled: A Pilot Project on Vocational Education For "Out-of-School Farm Youth" by G. Cameron Clark, FAO Regional Agricultural Extension and Education Officer, Bangkok, dated 11 September, 1970 - mimeo 5 pages.

3. Progress Report For Phase I as of 15 September, 1971 - 6 typed pages - submitted by Project Leader to UNICEF.

4. Second Progress Report For Phase I as of 31 December, 1971 - 2 typed pages - submitted by Project Leader to UNICEF, January 1972.

5. Summary of Research Findings In Phase I - mimeo 23 pages, submitted by Project Leader to UNICEF, January 1972.

6. Progress Report For Phase II as of 31 March, 1972 - 3 typed pages - submitted by Project Leader to UNICEF, April 1972.

7. Progress Report For Phase II as of 30 June, 1972 - mimeo 6 pages - submitted by Project Leader to UNICEF, July 1972.

8. Summary Statement on the Pilot Project on Vocational Education for Out-of-School Farm Youth in the Philippines - prepared by Pravit Sarabanchong, UNICEF Programming Officer, Philippines - typed 5 pages, dated 24 April, 1972, and provided to writer by UNICEF Regional Office, Bangkok.

BKK 5/10/72
RU/F 14.4.3
GCC/cn

CASE STUDY NO. 3:

Young Farmers' Courses in Indonesia

I. Summary

This case describes the Young Farmers Courses (KPT) and the activities of the Young Farmers' Training Centres (LPUT) in Indonesia. The KPT courses consisted of two hours of lectures per week on agriculture given at the local Village Education Center (BPMD) for mature farm youth who were also required to have home projects. The LPUT training offered terminal vocational agricultural education for one year to young future farmers between 17-25 years of age. The reasons for their rise and fall are briefly outlined.

II. Background to Programme

From 1950 the Extension Service of the Ministry of Agriculture in Indonesia started to establish Village Education Centers, commonly referred to as BPMDs (Balai Pendidikan Masjarakat Desa). As of 1971 there were 310 such registered centers throughout the nation. Each BPMD was designed to serve approximately 15 villages. It was to be centrally located with one to two hectares of land, planted to the principal crops of the area , with demonstration facilities for livestock and fish ponds. The building itself usually consisted of one large meeting room, a room for storage and distribution of seeds and fertilizers, a reading-cum-demonstration room and dwelling facilities for the extension worker who was expected to reside at each Center. These facilities were for the use of the entire community and other government departments such as Health, Education, Irrigation and

Forestry were encouraged to make use of them.

With a growing awareness within the Agricultural Extension Service of its educational function, it was only natural that the resident extension workers at each BPMD sought ways to reach and influence the rural youth in the surrounding villages. Thus was born the idea of Young Farmers' Courses which spread throughout of Java, particularly West Java.

III. Initial Planning

The head of each BPMD was encouraged to organize weekly two-hour courses for interested mature rural youth at his centre. These courses called KPTs (Kursus Pemuda Tani = Young Farmers Courses) were designed to continue 2-4 years, depending upon local needs and interest. In addition to class instruction each student was required to carry out a home project, under the general supervision of the resident BPMD extension worker. Despite the short period for formal training each week, emphasis initially was on the formal instruction given at the centre. The home-farm projects were added mainly to give the necessary practical training for application of the theory.

IV. Course of Events

The KPTs idea started well. However, due to a shortage of secondary school facilities and an increasing demand for education, there developed pressure from parents to use the KPT courses as a substitute for formal schooling for their children. Coupled with this was the natural tendency of the resident extension worker to respond to the villagers wishes with more and more lectures, leaving less and less time for supervision of individual home-farm projects. This gradually led to a major shift in

emphasis from practical agricultural training to more general education. With this development the average age of the trainees also rapidly declined from about 17 years to about 14 years. But the BPMDs could not devote their full-time and facilities to youth.

In order to meet this growing demand for education for farm youth, several provincial governments established separate centers for one year terminal youth training courses in agriculture. In Central Java 36 Young Farmers Training Centers called LPUTs (Lembaga Pendidikan Usaha Tani) were developed between 1950 and 1960. Thirteen largely residential centers called SUTs were started in other provinces. As these centers got underway, the demand from the more vocal parents for the BPMDs to continue their KPT courses declined. Emphasis of the provincial governments shifted to the intensive one year LPUT type training and KPT courses continued only at the discretion of the resident BPMD extension worker. In most cases KPT type training stopped.

The original objective of the LPUT training was to train young prospective farmer leaders who would help promote agricultural development in the villages where they were, hopefully, to start farming. Initial selection was carefully made by the provincial governments from which they received full financial support. Requirements for admission were:

1. Completion of primary education (six years).
2. 17-25 years of age.
3. Experience in farming.
4. Parents must have farm land (minimum 2 hectares or 5 hectares if outside Java).

The stated objective of these centres was to train future progressive farmers. In fact, up until about 1969, most of the graduates secured government employment as "mantris" (village level agricultural extension workers). This was due partly to the shortage of graduates from regular agricultural high school (SPMAs) and partly to the trainees' reluctance to go back to farming after having received a full year's additional "formal education". The teachers were largely seconded from the field staff of the provincial departments of agriculture on a full or part time basis.

By late 1960's the output of the agricultural high schools had improved to the extent that LPUT graduates were no longer in demand as village level agricultural extension workers. Emphasis of the centers then returned to training of future farm leaders, with half of each day being spent on theoretical lessons and half in field practice. In addition to the regular courses of agronomy, animal husbandry and farm management, training in extension techniques was also given in order to better equip the trainees for their intended future role as progressive farm leaders.

The centres suffer from lack of funds which prevent continuous and systematic operation. They lack teaching materials, farm equipment and supplies. Field practice is confined to whatever farm enterprises the centre can afford to undertake, which very much limits their practical farm experience. In the opinion of many, the trainees could gain more practical and broader farming experiences, on their own farms, under supervision.

V. Problems Encountered and How They Were Met

Pressure from farm parents for educational opportunities for their youth subverted the original purpose of the KPTs and forced the provincial governments to undertake a more formal type of training. This demand led to the creation of the LPUT and the SUT type of intensive training with undue emphasis on improving the general educational level of the students and less on the practical skills of farming.

Once the provincial governments started to recruit graduates of these centres as extension workers, the teachers came under even greater pressure from both parents and agricultural officials to change the focus of the centres. Emphasis shifted to producing government field workers, rather than independent future farmers. As most of the teachers were themselves recruited from the extension staff of the provincial departments of agriculture, they were unable to resist these pressures.

The age of the trainees was frequently closer to the minimum age of 17 years than to the maximum age of 25 years with the result that government was employing younger and younger staff for extension work with adult farmers. They lacked both maturity and agricultural experience and so did not prove to be satisfactory extension workers. In fact, due again to the demand for formal education, many students who could not get into middle schools were admitted to the LPUTs, although they were well under the minimum age limit.

VI. Results Achieved

1. The original goal of the KPTs courses, which was agricultural training for sons of farmers actively helping

on farms and destined to continue in farming, was not achieved.

2. Similarly, the original goal of the one year training courses (LPUT and SUT) which was to train farm youth in modern farming who would return and serve as future farm leaders, was also not achieved.

3. Even from the standpoint of staff formation, the quality and performance of the "mantris" (village level extension workers) recruited from these centres, left much to be desired.

VII. Significant Lessons

1. It appears extremely difficult, if not impossible, to successfully train youth in farming and have them continue therein, when the training is institution centered. The KPTs courses followed the traditional educational pattern of bringing the youth to the BPMD, the only innovation being to supplement the classroom instruction with home-farm projects. It would appear that only the converse works. In other words, vocational training in farming must start with the concrete home project, adding the formal institution-based training only to the extent required to ensure maximum learning regarding the home project.

2. Where formal educational opportunities are limited and demand is high, parents and youth will try to gain admission to any type of institution-based training in the hope that it may eventually lead to paid employment. In the field of agriculture,at least,non-institution based training stands a much better chance of not being subverted in this way.

Reference

1. BPMD (Balai Pendidikan Masjarakat Desa - Village Education Centre) by Soewardjo, Chief, Indonesian Extension Service, Djakarta, Indonesia - Pamphlet, 15 pages, 1953.

2. Vocational Training For Farmers' Sons In Indonesia by G. Cameron Clark, FAO Regional Agricultural Extension and Education Officer, FAO Regional Office, Bangkok, Thailand - mimeo 4 pages, April 1969.

3. Training Rural Youth For Farming In The Asia and Far East Region - FAO Report No. RAFE 6, Food and Agriculture Organization of the United Nations, Bangkok - 45 pages - 1972.

BKK 6/10/72
RU/E 14.4.3
GCC/cn